



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,563	09/14/2001	Gerard Mathis	LOM 24	7143
23599	7590	09/21/2004	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			TUNG, JOYCE	
			ART UNIT	PAPER NUMBER
			1637	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,563

Applicant(s)

MATHIS ET AL.

Examiner

Joyce Tung

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 4, 2004 has been entered.

The applicant's response filed June 4, 2004 to the Office action mailed 12/03/2003 has been entered. Claims 1-17 and 19-40 are pending.

Applicant's arguments with respect to claims 1-17 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-17 and 19-40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,340,747.

Art Unit: 1637

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-17 and 19 of the instant application are drawn to a process for constructing a signaling molecule by labeling a biological molecule, which can bind to a target partner, comprising covalently bonding to the biological molecule a labeling agent which is a fluorescent conjugate comprising an oligonucleotide covalently bonded to a rare-earth metal cryptate.

Claims 20-40 of the instant application are drawn to a conjugate comprising a rare-earth metal cryptate, an oligonucleotide, a biological molecule having a role to bind to a partner and the three elements are covalently linked. Claims 1-16 of U.S. Patent No. 6,340,747 are drawn to a fluorescent conjugate of a nucleotide or nucleotide comprising a ribo- or deoxyribo-nucleoside or nucleotide, a fluorescent marker consisting a rare earth cryptate and biological substance which is covalently linker to the functional group of rare-earth cryptate (See claim 13). Claim 17 of U.S. Patent No. 6,340,747 is drawn to a process for preparing the conjugate of claim 1 in which the ribo- or deoxyribo-nucleotide or nucleotide is conjugated with labeling molecules, fluorescent marker consisting of a rare earth cryptate bonded. The difference between the instant invention and the invention of U.S. Patent No. 6,340,747 is that in the instant invention, the method claims are for labeling molecules and the product claims are drawn to the conjugate which has the elements of the fluorescent conjugate of U.S. Patent No. 6,340,747 except the fluorescent marker. However, since the instant method is for constructing a signaling molecule, it would have been obvious to have a fluorescent marker on the conjugate as cited in the invention of U.S. Patent No. 6,340,747. Thus, the two inventions are overlapped on scope. Therefore, it is the judicially created doctrine of obviousness-type double patenting rejection.

Art Unit: 1637

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 8-17, 19, 20-26, and 28-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Lehn et al. (5,457,185, issued Oct. 10, 1995) or Lehn et al. (5534622, issued Jul. 9, 1996).

Lehn et al. (5,534,622) disclose a rare earth cryptates carrying functional groups, which can be used as fluorescent tracers for biological molecules (See column 2, lines 6-12 and column 18, lines 49-54). The rare earth cryptate is used for labeling biological molecules by means of a covalent bond (See column 1, lines 47-53). The biological molecules can be nucleic acid or antibody (See column 19, lines 1-8).

Lehn et al. (5,457,185) has the same teachings as the teachings of Lehn et al. (5,534,622) (See column 1, lines 61-63, column 1, lines 43-49, and column 20, lines 14-21)

Since the biological molecule includes oligonucleotide, the teachings of Lehn et al. read on the limitations of the claims.

Summary

5. No claims are allowable.

Art Unit: 1637

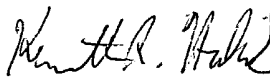
6. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (703) 308-1119 on Monday-Friday from 10:00 AM-6:00 PM.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

7. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1637 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung *J.T*
September 9, 2004


KENNETH R. HORLICK, PH.D
PRIMARY EXAMINER

9/16/04